



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Allen J. McLenaghan Art Unit: 2833
Serial No.: 10/673,652
Filed: September 29, 2003
Confirmation No.: 2351
For: ELECTRICAL CIRCUIT ASSEMBLY WITH MICRO-SOCKET
Examiner: Ross N. Gushi

January 14, 2005

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

TO THE COMMISSIONER OF PATENTS AND TRADEMARKS,
SIR:

Applicant acknowledges receipt of the Notice of Allowance and Fee(s) Due and the accompanying Notice of Allowability dated October 15, 2004.

Regarding the Examiner's REASONS FOR ALLOWANCE accompanying the Notice of Allowability, it should be noted that claims 36-38 and 40 do not recite "the socket assembled to hold...", as noted in the Notice of Allowability (page 2, lines 4-5).

It is submitted that a reason for the allowance of claim 36 and the claims depending therefrom is that the cited prior art neither teaches nor fairly suggests an electrical circuit assembly comprising a substrate having a first electrical connection pad and an integrated circuit device having a second electrical connection pad. The electrical circuit assembly has at least one electrically conductive connecting element attached to one of the first and second connection pads prior to assembly of the substrate and the integrated circuit device and at least one socket comprising at least two resilient members attached to the other of the first and second connection pads prior to assembly of the substrate and the integrated circuit device. The at least one socket is adapted to receive the at least one electrically conductive connecting element when the substrate and

integrated circuit device are assembled such that the at least two resilient members of the socket exert a biasing force against the at least one electrically conductive connecting element to hold the substrate and integrated circuit device in electrical and mechanical connection without the need for a connector separate from the substrate and integrated circuit device. The assembly is free of any containment structure between the substrate and the integrated circuit device surrounding the at least two resilient members.

It is submitted that a reason for the allowance of claim 37 and the claims depending therefrom is that the cited prior art neither teaches nor fairly suggests an electrical circuit assembly comprising a substrate having a first electrical connection pad and an integrated circuit device having a second electrical connection pad. The electrical circuit assembly has at least one socket attached to one of the first and second connection pads prior to assembly of the substrate and the integrated circuit device and at least one electrically conductive connecting element attached to the other of the first and second connection pads prior to assembly of the substrate and the integrated circuit device. The connecting element comprises a body having a headless free end. The at least one electrically conductive connecting element is received in the at least one socket when the substrate and integrated circuit device are assembled such that the socket exerts a biasing force against the body to hold the substrate and integrated circuit device in electrical and mechanical connection without the need for a connector separate from the substrate and integrated circuit device. The assembly is free of any containment structure between the substrate and the integrated circuit device surrounding the at least one socket.

It is submitted that a reason for the allowance of claim 38 and the claims depending therefrom is that the cited prior art

neither teaches nor fairly suggests an electrical circuit assembly comprising a substrate having a first electrical connection pad and an integrated circuit device having a second electrical connection pad. The electrical circuit assembly has at least one socket directly attached to one of the first and second connection pads prior to assembly of the substrate and the integrated circuit device and at least one electrically conductive connecting element attached to the other of the first and second connection pads prior to assembly of the substrate and the integrated circuit device. The connecting element comprises a body having an axial surface and at least one shoulder extending from the axial surface. The at least one electrically conductive connecting element is received in the at least one socket when the substrate and integrated circuit device are assembled such that the socket exerts a biasing force against the at least one shoulder to hold the substrate and integrated circuit device in electrical and mechanical connection without the need for a connector separate from the substrate and integrated circuit device. The assembly is free of any containment structure between the substrate and the integrated circuit device surrounding the at least one socket.

Furthermore, at page 2, lines 12-13 of the REASONS FOR ALLOWANCE, the Examiner states that claim 40 is allowable for the reasons previously indicated for claims 36-39. It should be noted that claim 40 is allowable for reasons independent of claims 36-39. In particular, a reason for the allowance of claim 40 and the claims depending therefrom is that the cited prior art neither teaches nor fairly suggests an electrical circuit assembly comprising a substrate and an integrated circuit device electrically and mechanically connected to the substrate. The electrical circuit assembly has at least one electrically conductive connecting element on the substrate and at least one socket on the circuit device for receiving the at least one

connecting element. The socket comprises at least two resilient members biased against the connecting element so that the circuit device and the substrate are held in electrical and mechanical connection by the biasing force of the resilient members against the connecting element.

Respectfully submitted,



Andrew N. Claerbout, Reg. No. 50,202
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

MEG/ANC/jmd/dlw

Express Mail No. EV 544918603 US